

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A display method for use with a light source and a display device operable to display pictures in accordance with a video signal, said method comprising:
displaying pictures on the display device according to a display timing;

illuminating the display device with light from the light source in response to a light source-controlling signal;

regulating an amount of light emitted from the light source in accordance with a value of maximum luminance of the video signal, wherein the regulated amount of light includes 0%, 100% and a value therebetween;

changing ~~an~~ the regulated amount of light emitted from the light source according to a light-change ~~timing~~ timing, ~~wherein the amount of light includes 0%, 100% and a value therebetween;~~

synchronizing the display timing with the light-change timing; and

adjusting transmissivity of the display device in accordance with the regulated amount of light in a manner such that the transmissivity of the display device increases and the regulated amount of the light decreases.

2. (Original) A display method according to claim 1, wherein the light-change timing is matched with a timing at which the display device renews half of an image plane.

3. (Original) A display method according to claim 1, wherein said synchronizing is

performed in response to a Vsync-signal from the display device.

4. (Original) A display method according to claim 1, wherein said synchronizing is adjusted in timing in accordance with at least one of a period of time in which the video signal is transferred to the display device and a period of time in which the display device responds to the video signal.

5. (Previously Presented) A display method according to claim 3, for use with a temperature sensor operable to detect temperature, wherein said synchronizing is adjusted in timing in accordance with the temperature detected by the temperature sensor, and

wherein an interval from the Vsync-signal to when the amount of light begins to be changed changes in accordance with the temperature detected by the temperature sensor.

6. (Original) A display method according to claim 1, further comprising:
extracting a feature parameter of the video signal,
wherein said synchronizing is adjusted in timing in accordance with the feature parameter.

7. (Currently Amended) A display controller for use with a display device and a light source, said display controller comprising:

a video signal-analyzing unit operable to receive and analyze a video signal, and to

generate adjustment parameter information and light source light-emitting amount information;

a video signal-adjusting unit operable to receive the video signal, adjust the video signal in accordance with the adjustment parameter information from said video signal-analyzing unit, and to feed the adjusted video signal into the display device; and

a light source-controlling unit operable to regulate a light-emitting amount of the light source in accordance with a value of maximum luminance of the video signal, and to feed a light source-controlling signal into the light source in accordance with the light source light-emitting amount information from said video signal-analyzing unit, the regulated light-emitting amount including 0%, 100% and a value therebetween,

wherein said video signal-analyzing unit synchronizes a timing at which the display device is to display a picture based on the adjusted video signal from said video signal-adjusting unit, with a timing at which the light source is to change ~~[[a]]~~ the regulated light-emitting amount in response to the light source-controlling signal from said light source-controlling unit ~~unit, the light-emitting amount including 0%, 100% and a value therebetween,~~ and

wherein said video signal-adjusting unit adjusts transmissivity of the display device in accordance with the regulated light-emitting amount in a manner such that the transmissivity of the display device increases and the regulated light-emitting amount decreases.

8. (Original) A display controller according to claim 7, wherein said video signal-

analyzing unit matches the timing at which the light source is to change the light-emitting amount with a timing at which the display device is to renew half of an image plane.

9. (Original) A display controller according to claim 7, wherein said video signal-analyzing unit synchronizes, in response to a Vsync-signal from the display device, the timing at which the display device is to display the picture with the timing at which the light source is to change the light-emitting amount.

10. (Original) A display controller according to claim 7, wherein said video-signal-analyzing unit adjusts synchronous timing in accordance with at least one of a period of time in which the video signal is transferred to the display device from said video signal-adjusting unit and a period of time in which the display device responds to the video signal.

11. (Previously Presented) A display controller according to claim 9, further comprising:

a temperature sensor operable to detect temperature,

wherein said video signal-analyzing unit adjusts synchronous timing in accordance with the temperature detected by said temperature sensor, and

wherein an interval from the Vsync-signal to when said light source controlling unit begins to change the amount of light changes in accordance with the temperature detected by said temperature sensor.

12. (Currently Amended) A display apparatus comprising:

a display device;

a light source; and

a display controller comprising:

a video signal-analyzing unit operable to receive and analyze a video signal, and to generate adjustment parameter information and light source light-emitting amount information;

a video signal-adjusting unit operable to receive the video signal, adjust the video signal in accordance with the adjustment parameter information from said video signal-analyzing unit, and to feed the adjusted video signal into said display device; and

a light source-controlling unit operable to regulate a light-emitting amount of the light source in accordance with a value of maximum luminance of the video signal, and to feed a light source-controlling signal into said light source in accordance with the light source light-emitting amount information from said video signal-analyzing unit, the regulated light-emitting amount including 0%, 100% and a value therebetween,

wherein said video signal-analyzing unit synchronizes a timing at which said display device displays a picture based on the adjusted video signal from said video signal-adjusting unit, with a timing at which said light source changes ~~[[a]]~~ the regulated light-emitting amount in response to the light source-controlling signal from said light source-controlling ~~unit unit,~~ the light-emitting amount including 0%, 100% and a value therebetween;

wherein said video signal-adjusting unit adjusts transmissivity of said display device in

accordance with the regulated light-emitting amount in a manner such that the transmissivity of the display device increases and the regulated light-emitting amount decreases;

wherein said display device is operable to display a picture in accordance with the adjusted video signal that is fed from said video signal-adjusting unit of said display controller; and

wherein said light source is operable to illuminate said display device with light in accordance with the light source-controlling signal that is fed from said light source-controlling unit of said display controller.

13. (Original) A display apparatus according to claim 12, wherein said video signal-analyzing unit matches the timing at which said light source changes the light-emitting amount with a timing at which said display device renews half of an image plane.

14. (Original) A display apparatus according to claim 12, wherein said video signal-analyzing unit synchronizes, in response to a Vsync-signal from said display device, the timing at which said display device displays the picture with the timing at which said light source changes the light-emitting amount.

15. (Original) A display apparatus according to claim 12, wherein said video-signal-analyzing unit adjusts synchronous timing in accordance with at least one of a period of time in which the video signal is transferred to said display device from said video signal-adjusting

unit and a period of time in which said display device responds to the video signal.

16. (Previously Presented) A display apparatus according to claim 14, further comprising:

a temperature sensor operable to detect temperature,

wherein said video signal-analyzing unit adjusts synchronous timing in accordance with the temperature detected by said temperature sensor, and

wherein an interval from the Vsync-signal to when said light source-controlling unit begins to change the amount of light changes in accordance with the temperature detected by said temperature sensor.